

1480.6

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

WASHINGTON

DEC 15 1930

Mr. W. A. Russel,  
Rural Delivery,  
Carbondale, Pa.

My dear Mr. Russel:

The following table gives the results of examination of a sample of water from your well collected by S. W. Lohman in connection with studies of ground-water conditions in northeastern Pennsylvania.

Partial analysis of water from 6-inch drilled flowing well 90 feet deep, owned by Mr. W. A. Russel, Carbondale, Pa., collected September 17, 1930:

<u>Analyzed by K. T. Williams</u>	<u>Parts per million</u>
Calcium (Ca) .....	31
Magnesium (Mg) .....	3.7
Sodium and Potassium (Na+K) (calculated) .....	1.3
Bicarbonate ( $\text{HCO}_3$ ) .....	102
Sulphate ( $\text{SO}_4$ ) (turbidity) .....	5
Chloride (Cl) .....	3
Nitrate ( $\text{NO}_3$ ) .....	3
Total hardness as $\text{CaCO}_3$ (calculated) ..	93

The analytical results indicate that this water contains around 100 parts per million of dissolved mineral matter, consisting largely of calcium bicarbonate. The hardness is not far from the average hardness of the waters used for public supplies in the large cities of the United States. Such water is usually entirely satisfactory for all ordinary uses so far as they are affected by the mineral content.

An analysis of the mineral content of a water gives no indication of the sanitary condition, and statements based on such an analysis are made without reference to possible pollution.

The inclosed notes with reference to the mineral constituents of natural waters may be of interest in connection with the analysis.

Very truly yours,

  
Director.

Inclosure-27778